

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant :	Mullins <i>et al.</i>	Art Unit :	1648
Serial No. :	10/780,507	Examiner :	Bo Peng
Filed :	February 17, 2004	Conf. No. :	7871
Title :	ANCESTRAL AND COT VIRAL SEQUENCES, PROTEINS AND IMMUNOGENIC COMPOSITIONS		

**MAIL STOP AMENDMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Applicants request consideration of the references listed on the attached PTO-1449 form.

This statement is being filed before the receipt of a first Office Action on the merits.

No fee is believed due. However, please apply any charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 08987-023001.

Respectfully submitted,

Date: Jan. 5, 2007

Margo Tsao Reg. No. 59,812  
Y. Rocky Tsao  
Reg. No. 34,053

Fish & Richardson P.C.  
225 Franklin Street  
Boston, MA 02110  
Telephone: (617) 542-5070  
Facsimile: (617) 542-8906

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 08987-023001	Application No. 10/780,507
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)  (37 CFR §1.98(b))		Applicant Mullins <i>et al.</i>	
		Filing Date February 17, 2004	Group Art Unit 1648

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	CA	Learn <i>et al.</i> , "Maintaining the Integrity of Human Immunodeficiency Virus Sequence Database," <i>J. Virol.</i> 70:5720-5730 (1996)
	CB	Leitner <i>et al.</i> , "Tempo and Mode of Nucleotide Substitutions in <i>gag</i> and <i>env</i> Gene Fragments in Human Immunodeficiency Virus Type 1 Populations with a Known Transmission History," <i>J. Virol.</i> 71(6):4761-4770 (1997)
	CC	Letvin, "Progress in the Development of an HIV-1 Vaccine," <i>Science</i> 280(5371):1875-1880 (1998)
	CD	Lole <i>et al.</i> , "Full-Length Human Immunodeficiency Virus Type 1 Genomes from Subtype C-Infected Seroconverters in India, with Evidence of Intersubtype Recombination," <i>J. Virol.</i> 73(1):152-160 (1999)
	DA	Long <i>et al.</i> , "HIV Type 1 Variants Transmitted to Women in Kenya Require the CCR5 Coreceptor for Entry, Regardless of the Genetic Complexity of the Infecting Virus," <i>AIDS Res. Hum. Retroviruses</i> 18:567-576 (2002)
	DB	Louwagie <i>et al.</i> , "Genetic Diversity of the Envelope Glycoprotein from Human Immunodeficiency Virus Type 1 isolates of African Origin," <i>J. Virol.</i> 69(1):263-271 (1995)
	DC	McCutchan <i>et al.</i> , "Envelope protein human immunodeficiency virus 1," retrieved from EBI Database Accession No. 092763 (Nov. 1, 1998)
	DD	McCutchan <i>et al.</i> , "Diversity of the Human Immunodeficiency Virus Type 1 Envelope Glycoprotein in San Francisco Men's Health Study Participants," <i>AID Research and Human Retroviruses</i> 14(4):329-337 (1998)
	DE	Needleman <i>et al.</i> , "A General Method Applicable to the Search for Similarities in the Amino Acid Sequence of Two Proteins," <i>J. Mol. Biol.</i> 48:443-453 (1970)
	DF	Pearson <i>et al.</i> , "Improved tools for biological sequence comparison," <i>Proc. Natl. Acad. Sci. USA</i> 85:2444-2448 (1988)
	DG	Penny <i>et al.</i> , "Envelope glycoprotein, human Immunodeficiency virus 1," retrieved from EBI Database Accession No. Q73343 (Nov. 1, 1996)
	DH	Penny <i>et al.</i> , " <i>env</i> Gene Sequences of Primary HIV Type 1 isolates of Subtypes B, C, D, E, and F Obtained from the World Health Organization Network for HIV isolation and Characterization," <i>AIDS Research and Human Retroviruses</i> , U.S. 12(8):741-747 (1996)
	DI	Posada <i>et al.</i> , "Bioinformatics Applications Note – Model test: testing the model of DNA substitution," <i>Bioinformatics</i> 14:817-818 (1998)
	DJ	Rambaut <i>et al.</i> , "Seq-Gen: an application for the Monte Carlo simulation of DNA sequence evolution along phylogenetic trees," <i>Comput. Appl. Biosci</i> 13:235-238 (1997)
	DK	Richman <i>et al.</i> , "Self-incompatibility alleles from <i>Physalis</i> : Implications for historical inference from balanced genetic polymorphisms," <i>Proc. Natl. Acad. Sci. USA</i> 96(1):168-172 (1999)
	DL	Robertson <i>et al.</i> , "Recombination in HIV-1," <i>Nature</i> 374(6518):124-126 (1995)
	DM	Robinson <i>et al.</i> , "Simian Immunodeficiency Virus DNA Vaccine Trial in Macaques," <i>Ann. New York Acad. Sci</i> 27:209-211 (1995)
	DN	Robinson, "DNA vaccines for immunodeficiency viruses," <i>AIDS</i> 11(A):S109-S119 (1997)
	DO	Rodrigo <i>et al.</i> , "Coalescent estimates of HIV-1 generation time <i>in vivo</i> ," <i>Proc. Natl. Acad. Sci. USA</i> 96(5):2187-2191 (1999)

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EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

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	DP	Schaal <i>et al.</i> , "Gene genealogies and population variation in plants," <i>Proc. Natl. Acad. Sci. USA</i> 97(13):7024-7029 (2000)
	DQ	Schadt <i>et al.</i> , "Computational Advances in Maximum Likelihood Methods for Molecular Phylogeny," <i>Genome Research</i> 8(3):222-233 (1998)
	DR	Shankarappa <i>et al.</i> , "Consistent Viral Evolutionary Changes Associated with the Progression of Human Immunodeficiency Virus Type 1 Infection," <i>J. Virol.</i> 73(12):10489-10502 (1999)
	DS	Sherry <i>et al.</i> , "Alu Evolution in Human Populations: Using the Coalescent to Estimate Effective Population Size," <i>Genetics</i> 147(4):1977-1982 (1997)
	DT	Slatkin, "Gene Genealogies Within Mutant Allelic Classes," <i>Genetics</i> 143(1):579-587 (1996)
	DU	Smith <i>et al.</i> , "Human Rhinovirus Type 14:Human Immunodeficiency Virus Type 1 (HIV-1) V3 Loop Chimeras from a Combinatorial Library Induce Potent Neutralizing Antibody Responses Against HIV-1," <i>J. Virol.</i> 72(1):651-659 (1998)
	DV	Smith <i>et al.</i> , "Comparison of Biosequences," <i>Adv. Appl. Math.</i> 2:482-489 (1981)
	DW	Smith <i>et al.</i> , "The genetic data environment an expandable GUI for multiple sequence analysis," <i>CABIOS</i> 10:671-675 (1994)
	DX	Takehisa <i>et al.</i> , "Human Immunodeficiency Virus Type 1 Intergroup(M/O) Recombination in Cameroon," <i>J. Virol.</i> 73(8):6810-6820 (1999)
	DY	Theodore <i>et al.</i> , "Short Communication - Construction and Characterization of a Stable Full-Length Macrophage-Tropic HIV Type 1 Molecular Clone That Directs the Production of High Titers and Progeny Virions," <i>AIDS Res. Human Retrovir.</i> 12:191-194 (1996)
	DZ	Thompson <i>et al.</i> , "CLUSTAL W: improving the sensitivity of progressive multiple sequence alignment through sequence weighting, position-specific gap penalties and weight matrix choice," <i>Nucleic Acids Res.</i> 22:4673-4680 (1994)
	EA	Upchurch <i>et al.</i> , "Position and degree of mismatches and the mobility of DNA heteroduplexes," <i>Nucleic Acids Res.</i> 28(12):E69 (2000)
	EB	Verma <i>et al.</i> , "Gene Therapy - promises, problems and prospects," <i>Nature</i> 389:239-242 (1997)
	EC	Yasutomi <i>et al.</i> , "Simian Immunodeficiency Virus-Specific Cytotoxic T-Lymphocyte Induction through DNA Vaccination of Rhesus Monkeys," <i>J. Virol.</i> 70:678-681 (1996)
	ED	Yu <i>et al.</i> , "Phenotypic and Genotypic Characteristics of Human Immunodeficiency Virus Type 1 from Patients with AIDS in Northern Thailand," <i>J. Virol.</i> 69(8):4649-4655 (1995)
	EE	Zhu <i>et al.</i> , "An African HIV-1 sequence from 1959 and implications for the origin of the epidemic," <i>Nature</i> 391(6667):594-597 (1998)
	EF	The AIDS Knowledge Bases - AIDS Vaccines - Internet website: <a href="http://www.hivinsite.ucsf.edu">http://www.hivinsite.ucsf.edu</a> (printed Aug. 17, 1999)
	EG	The NIAID Division of AIDS, Science, Vaccine Concepts/Designs, Recombinant Viral Surface Protein Vaccines - Internet website: <a href="http://www.niaid.nih.gov">http://www.niaid.nih.gov</a> (printed Aug. 16, 1999)
	EH	The NIAID Division of AIDS, General Info, Basic Information About AIDS and HIV Internet website: <a href="http://www.niaid.nih.gov">http://www.niaid.nih.gov</a> (printed August 16, 1999)
	EI	The NIAID Division of AIDS, Science, Vaccine Concepts/Designs, Naked DNA Vaccines - Internet website: <a href="http://www.niaid.nih.gov">http://www.niaid.nih.gov</a> (printed Aug. 16, 1999)
	EJ	The NIAID Division of AIDS, Science, Vaccine Designs/Concepts - Internet website: <a href="http://www.niaid.nih.gov">http://www.niaid.nih.gov</a> (printed Aug. 16, 1999)

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	EK	International AIDS Vaccine Initiative, IAVI Report – July – September 1998, HIV DNA Vaccines Move Slowly Into Human Trials – Internet website: <a href="http://www.iavi.org">http://www.iavi.org</a> Vaccine Initiative, IAVI Report – July-August 1999, A Newsletter on International Aids Vaccine Research – Internet website: <a href="http://www.iavi.org">http://www.iavi.org</a> (printed Aug. 16, 1999)
	EL	International AIDS Vaccine Initiative – Scientific Areas of Emphasis – Internet website: <a href="http://www.iavi.org">http://www.iavi.org</a> (printed Aug. 16, 1999)

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